an X-ray irradiation unit;

an X-ray image sensor including an X-ray-to-photo conversion device for converting an X-ray radiated from said X-ray irradiation unit to a photo signal for corresponding to an intensity of the X-ray and a photoelectric conversion device for converting the photo signal to an electric signal to output brightness data of an image in a unit of a pixel;

a correction factor setting unit for setting a correction factor based on electronic image data of a reference subject provided from said X-ray image sensor which takes an X-ray photograph of the reference subject;

a correction factor storage unit for storing the correction factor set in said correction factor setting unit; and

a controller for correcting the brightness data of the image output from said X-ray image sensor based on the correction factor to output corrected brightness data.

2. (Twice Amended) The X-ray camera as set forth in claim 1, wherein said correction factor for improvement of picture quality acquired from the brightness data of the image obtained by taking the X-ray photograph of said reference subject is set therein for each pixel individually.

3. (Amended) The X-ray camera as set forth in claim 2, wherein a value acquired by dividing a predetermined brightness reference value with a brightness value of each pixel in the image obtained by taking the X-ray photograph of said reference

subject is used as a [pixel] correction factor for said pixel.

4. (Twice Amended) The X-ray camera as set forth in claim 3, wherein said controller corrects the brightness of each pixel by multiplying a brightness value of said pixel in the image obtained by taking the X-ray photograph of a subject body by said [pixel] correction factor of the corresponding pixel.

5. (Amended) The X-ray camera as set forth in claim 2, wherein a value acquired by dividing an average value of brightness of the image obtained by taking the X-ray photograph of said reference subject with the brightness value of each pixel is used as a correction factor for said pixel.

6. (Twice Amended) The X-ray camera as set forth in claim 5, wherein said controller corrects the brightness of each pixel by multiplying a brightness value of said pixel in the image obtained by taking the X-ray photograph of said reference subject by said correction factor of the corresponding pixel.

7. (Amended) The X-ray camera as set forth in claim 2, wherein a value acquired by dividing a representative value of brightness of the image obtained by taking the X-ray photograph of said reference subject with the brightness value of each pixel is used as a correction factor for said pixel.

8. (Twice Amended) The X-ray camera as set forth in claim 7, wherein said controller corrects brightness of each pixel by multiplying a brightness value of said pixel in the image obtained by taking the X-ray photograph of said reference subject by said correction factor of the corresponding pixel.

9. (Twice Amended) The X-ray camera as set forth in claim 2, wherein urethane resin for typifying a soft-tissue equivalent material representing muscles and adipose tissue, composed of urethane resin and the like, is used as the reference subject.

10. (Twice Amended) The X-ray camera as set forth in claim 2, wherein any of epoxy resin and aluminum typifying a bone-tissue equivalent material is used as the reference subject.

11. (Twice Amended) The X-ray camera as set forth in claim 2 further comprising a correction factor setting means for setting a correction factor, other than ordinary X-ray photography, in order to acquire said correction factor, wherein said X-ray camera can be operated for resetting a correction factor for improvement of picture quality at an arbitrary timing when said equipment is first installed, when a user determines it necessary.

12. (Amended) The X-ray as set forth in claim 1

wherein said correction factor storage unit stores three types of correction factors obtained by dividing each of three values by a brightness value of each pixel, said three values being an average value and a representative value of brightness of an image obtained by taking the X-ray photograph of said reference subject, and a predetermined reference brightness value, and

said controller selects one correction factor among said three types of correction factors when making correction of brightness of the image obtained by taking the X-ray photograph of said reference subject.

13. (Amended) The X-ray camera as set forth in claim 1

wherein said correction factor storage means stores two types of correction factors corresponding to a soft-tissue equivalent material and a bone-tissue equivalent material by taking photographs of said two equivalent materials, and

said controller selects one correction factor between said two types of correction factors when making correction of brightness of the image obtained by taking the X-ray photograph of said reference subject.

14. (Twice Amended) The X-ray camera as set forth in claim 1, wherein a plurality of X-ray image sensors are arranged in a manner that a portion of an image-capture area of each said sensor overlaps with one another, in order to take an X-ray image of an expanded size without an error of brightness in the overlapped portion.